

## **ABSTRACT**

Systems and methods are described herein for determining which components of a source operating system are required to be included in a target operating system to support selected source operating system features in the target operating system. Data objects are constructed to represent each component and feature of the source operating system, each data object identifying Exports and References for the component or feature it represents. The dependency model identifies, for each component, other components that must be included in a target operating system having the component. A target operating system builder program receives input from a user as to the features the user desires to include in the target operating system. The dependency model is utilized to identify and select the components from the source operating system necessary to support the selected features. The selected components are then linked to create the target operating system.